

### **REMARKS**

Applicants wish to thank Examiner Mercier and supervisory Examiner Woodward for the helpful discussion with Applicants Representative on July 8, 2009. Applicants' Representative presented the arguments below and in particular, referred to the specification at page 5, 2<sup>nd</sup> full paragraph to page 6, first full paragraph. The Examiners appeared favorably convinced by the arguments. The following is intended to expand upon the discussion.

Claims 1-3, 5-8, 10-14, 16-20 are active in this application.

The rejections of the claims over Yamaguchi et al (U.S. Patent 6,169,114) and Shiraishi (U.S. Patent 5,733,344), Sugii et al (US 2003/0044599), Dahms et al ( US 5,674,475), Kern ( US 4,717,737), Kanada et al ( US 6,596,285) are traversed.

The present invention provides a peel-off cosmetic pack preparation in which polyvinyl alcohol is used as a film-forming agent to form a continued film on the skin, and this film is then peeled off. In order to form such a continued film, it is required that an aqueous phase having polyvinyl alcohol dissolved therein is a continuous phase. For that reason, in peel-off cosmetic pack preparations, a large amount of water is in general blended.

The present invention as claimed in **Claim 1** relates to a cosmetic pack, comprising:

- (a) 5-20 wt% of polyvinyl alcohol; and
- (b) 0.01-10 wt% of a titanium-titanium dioxide sinter;
- (d) a water-soluble thickener as a component;
- (f) a polyglycerol fatty acid ester; and

70 to 90 wt% of water;

wherein said cosmetic pack is a peel-off cosmetic pack.

The present invention as claimed in **Claim 20** relates to a cosmetic pack, comprising:

(a) 5-20 wt% of polyvinyl alcohol; and

(b) 0.01-10 wt% of a titanium-titanium dioxide sinter;

(d) a water-soluble thickener as a component;

(f) a polyglycerol fatty acid ester; and

water;

wherein said cosmetic pack is a peel-off cosmetic pack.

Yamaguchi et al (U.S. Patent 6,169,114) and Shiraishi (U.S. Patent 5,733,344), Sugii et al (US 2003/0044599), Dahms et al ( US 5,674,475), Kern ( US 4,717,737), Kanada et al ( US 6,596,285), alone or in combination, fail to disclose or suggest a peel-off cosmetic pack as claimed in Claims 1 and 20.

Shiraishi should not be combined with Yamaguchi or any of the other references because it relates to a temporary hair dye and not a peel off type pack or similar composition to be applied to skin, specifically facial skin. Accordingly, Shiraishi is in a different field of endeavor.

Further, Applicants wish to draw the Examiners' attention to the specification at page 5, 2<sup>nd</sup> full paragraph to page 6, first full paragraph.

The titanium-titanium dioxide sinter used as the component (b) in the present invention is added to increase the covering effect of the cosmetic pack preparation, to make it easy to identify the applied areas and peeled areas and the skin cleaning effect, and to increase the drying speed and film strength, thereby rendering the film easy to be peeled off.

Since the particles of titanium-titanium dioxide sinter used as the component (b) have a particle surface activity lower than that of conventionally used titanium oxide and black iron oxide, the titanium-titanium dioxide sinter can ensure excellent dispersion stability without impairing the preservation stability of the cosmetic pack preparation containing polyvinyl alcohol. Any titanium-titanium dioxide sinter commonly used in cosmetic compositions can be used as the component (b) without any specific limitations. Titanium-titanium dioxide sinter produced by mixing fine particles of titanium and titanium oxide at a ratio of 1:5 and sintering the mixture at a temperature of 900-1000°C. under reduced pressure for 3-5 hours can be given as an example.

To ensure a good covering effect and dispersion stability of pigments, the average particle diameter of the component (b) is preferably in the range of 0.6-2.0  $\mu\text{m}$ , and more preferably 0.6-1.5  $\mu\text{m}$ . Particles of titanium-titanium dioxide sinter of which the surface has been treated using a commonly known method may be used. Either one type of titanium-titanium dioxide sinter or a mixture of two or more types of titanium-titanium dioxide sinter can be used. Commercially available products of titanium-titanium dioxide sinter such as TILACK D (manufactured by Ako Kasei Co., Ltd.) and the like can also be used as the component (b).

The content of the above titanium-titanium dioxide sinter of the component (b) in the cosmetic pack preparation of the present invention is preferably 0.01-10%, and more preferably 0.1-5%. If less than 0.01%, the covering effect is insufficient to clearly identify the area coated with the cosmetic pack preparation and the film strength improving effect is small. If more than 10%, spreadability is insufficient.

Shiraishi, Sugii et al, Dahms et al, Kern, Kanada et al fail to cure the defects of Yamaguchi et al because none of Shiraishi, Sugii et al, Dahms et al, Kern, Kanada et al discloses a peel-off cosmetic pack as claimed and because none of them addresses the technical problem and its solution as given by this invention. That is, the present invention addresses the problem of reduced color pigment dispersibility, which is a problem only in a peel-off cosmetic pack comprising an aqueous solution of polyvinyl alcohol and which, thus, can NOT be conceived from any of the aforementioned references, and solves for the first time the problem by blending 0.01 - 10 wt % of a titanium-titanium dioxide sinter (the component [b]) in combination with other components in the cosmetic pack (see p. 2 of the specification).

Moreover, the solution of problems in the present invention are not disclosed or suggested by Yamaguchi et al, Shiraishi, Sugii et al, Dahms et al, Kern, Kanada et al, alone or in combination. Specifically, under the conventional technology, it has been difficult to stably disperse a pigment in a polyvinyl alcohol aqueous solution due to influences of surface activity of the pigment. In this context, the present invention has realized a stable dispersion system by employing, as a pigment, a titanium-titanium dioxide sinter which has a small mutual action with polyvinyl alcohol and further using a polyglycerol fatty acid ester as a dispersant.

Therefore the rejections of the claims over Yamaguchi et al (U.S. Patent 6,169,114) and Shiraishi (U.S. Patent 5,733,344), Sugii et al (US 2003/0044599), Dahms et al ( US 5,674,475), Kern ( US 4,717,737), Kanada et al ( US 6,596,285) should be withdrawn.

This application presents allowable subject matter, and the Examiner is kindly requested to pass it to issue. Should the Examiner have any questions regarding the claims or otherwise wish to discuss this case, he is kindly invited to contact Applicants' below-signed representative, who would be happy to provide any assistance deemed necessary in speeding this application to allowance.

Respectfully submitted,

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